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Letters should be signed with the writer's real
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the writer's wish.

THE PLOUGHMAN offers great advantages to ad-
vertisers. Its circulation is large and among the
most active and intelligent portion of the com-
munity.

AGRICULTURAL.

Management of Orchards.

One of the most common mistakes in the
management of young trees is to keep up
the cultivation with hoe crops until the
trees have grown larger than they should
before beginning to bear. It is the profit
from a fruit tree to produce fruit, and the
earlier in its history that the fruit production
begins, if it is not the result of injury to
the tree, the greater the profit will be. If
the habit of bearing fruit is formed, even
though it be the result of a check to wood
growth, that habit will be kept up. There
must be a check some time or the tree will
never bear. If it is applied only after the
tree has grown very large, the check will
probably be too severe, and the growing of
one crop will prevent the formation of any
fruit buds for a crop next year. In this
way the habit of bearing only every other
year is established.

It is worse still if the bearing tree is
heavily manured, as it is very likely to be.
Stable manure does not induce the trees to
put forth fruit buds, but always the re-
verse. Usually the first crop of a young
tree is only a few specimens. These it
needs no extra manuring to ripen, and if
it alone the tree will make buds for a
larger crop next season. But nine times
out of ten the owner of the orchard is
rejoiced with the prospect that his labor is
about to be rewarded, that nothing
beaten to too good for the trees that are
producing fruit. So he draws load after
load of stable manure, spreading it all over
the surface, and then he is likely to add
some mineral fertilizer whose effect is
to ferment the manure and make its
nitrogen still more effective than it
would be. Such an excess of nitrogen
more than offsets what good the mineral
fertilizer would do. It must be very
poor land where a young tree will not
make as much wood growth as it should.
Twelve to fifteen inches of new wood each year
is as much as any tree can be expected to
grow, and when the tree is bearing, six to ten
inches new growth is better than more. A
dressing of potash and phosphate each winter
will develop enough plant food in most soils
to make all the growth that is needed.

California is one of the great fruit pro-
ducing States, and its climate favors early
productiveness of young trees. They begin
to bear when only two or three years
planted. We believe this is due to the
great check which the dry season produces
on trees in that climate. It has been
noticed in our Eastern orchards that a season
dry in its early part is usually followed by
plentiful supply of fruit next season.
But if it rains too early they
may make a supplementary growth
that will change fruit buds into buds
for growing twigs and leaves. When
however, heavy rains are postponed until
late in the summer and fall, they make the
air cooler, so that the fruit buds are kept
in their natural condition for going into the
winter. The late rains also serve to protect
the soil from deep freezing, which will injure
the tree roots. All over the eastern part of
this country the present spring has been
almost as dry as the California dry season.
But, then, the indications for next year
favor an abundant fruit crop, at least of all
fruits that grow on trees.

When the bearing habit is fully estab-
lished the orchard should not be plowed,
but covered with clover, timothy and orchard
grass. The clover will be out of the soil
after the second year, but it will help both
the grasses to make a good seed. Unless
plowed with clover and timothy, orchard
grass is likely to grow in patches,
and only make a sod after several
years. Orchard grass makes the earliest
sod in spring, but it needs to be
sown closely as to prevent it from
sowing to itself. It is a good plan to cut
up seed stalks in orchards that is seed-
ing as much. This will help the manure
on the paved animals, with the
early application of potash and phosphate,

make as much growth in the tree as is com-
patible with its health.

It must be remembered, however, that
some varieties of apple and other trees
are much stronger growers than others.
A difference should be made in man-
uring the Northern Spy, and much less
vigorous varieties, like the Spitzenberg,
Russet and Pippin, though the weaker
variety, the more likely it is to be
injured by an excess of fermenting manure.
If these varieties need mineral fertilizers
they can best be applied in the form of
nitrate of potash or soda with commercial
superphosphate made by the use of sulphuric
acid to either bone or rock. These forms
of nitrogenous and mineral fertility have
the advantage of being available early
in the spring. If they are taken into
the circulation then, a healthy foliage
is insured, and this will do away
with the dread of fungous diseases in
midsummer, when there is always much
decaying organic matter in the soil, that
such fungus naturally develops from. The
Northern Spy apple tree grows so vigor-
ously that it never needs any manure except
potash, lime and phosphate, unless it is top
grafted on some old tree that would have
decayed years ago unless some more vigor-
ous variety had been grafted into its stock.

Cultivating Turnips.

So many farmers sow turnips as a cash
crop in corn and potatoes that they forget
there is any better way. As a rule each
crop does not pay. They always interfere
with the late cultivation of hoe crops,
which is always important and sometimes
necessary if there is a dry time late in sum-
mer. Now that most farmers cultivate hoe
crops very shallowly in the summer, merely
scratching the surface to kill weeds while
they are small, there is less objection to late
cultivation than used to be the case. In the
old days, when a plow was used at the last
cultivation to pile the soil up against the hills
of corn or potatoes, the result was always
injury and often ruin to the crop. In such
cases, too, there was little chance for turnips
to grow as the soil piled up against the hills
turned the water into the middle of the
rows, or rather the corn leaves themselves
did so, as they bend over to the middle of the
rows by July and often in June turning the
slightest shower into the middle of the row,
where most of the corn roots are. Under
the hill the soil is almost always dry until
the corn is out. The potato too does not
like to be so much, but it, too, throws a good
deal of the moisture that falls on it into the
space between the hills.

In either a dry or wet season turnips are
better if grown where they can be culti-
vated and hoed. If the seed is sown in
drills two feet apart, a horse can draw a
narrow cultivator through this space,
scratching the dry soil, and not only killing
small weeds, but throwing a little dust over
the turnip plants. This will help to kill
the weeds and the tender leaves. A better
way is to scatter dry lime or gypsum in
the line of the rows, thus enabling the
cultivator to keep his horse between with-
out stepping on the young plants. If this
is done two or three times the turnips will
only need hoeing in the line of the rows.
This can be done by drawing a
hoe five or six inches wide through the grow-
ing plants. Turnips grow better in a
loose soil, and possibly ten times
as much, as they would if sown as a cash
crop, which is usually the way farmers
devise to avoid work, and as usual with
the lazy man making himself more work than
he would have if he did not try to dodge it.
A good deal of the work which the culti-
vation requires is offset in the cash crop
by the extra labor required to haul over a
large field to gather the turnips that if
cultivated could be grown on a quarter of
an acre. Besides this, the plan of cultivat-
ing turnips cleans the land of weeds. Growing
them as a cash crop leaves all the weeds
to grow as long as the turnips are
growing. Many weeds will seed in that
time, and all those that are biennial will
root themselves under shelter of the cash
crop ready to grow and seed next season.

A farmer may sow turnips among grow-
ing corn or potatoes if he has no other place
for them. But it is not an economical prac-
tice, and usually the corn or potatoes is in-
jured by lack of cultivation more than the
turnips are worth, even if they could be
harvested for nothing.

New York Farm Notes.

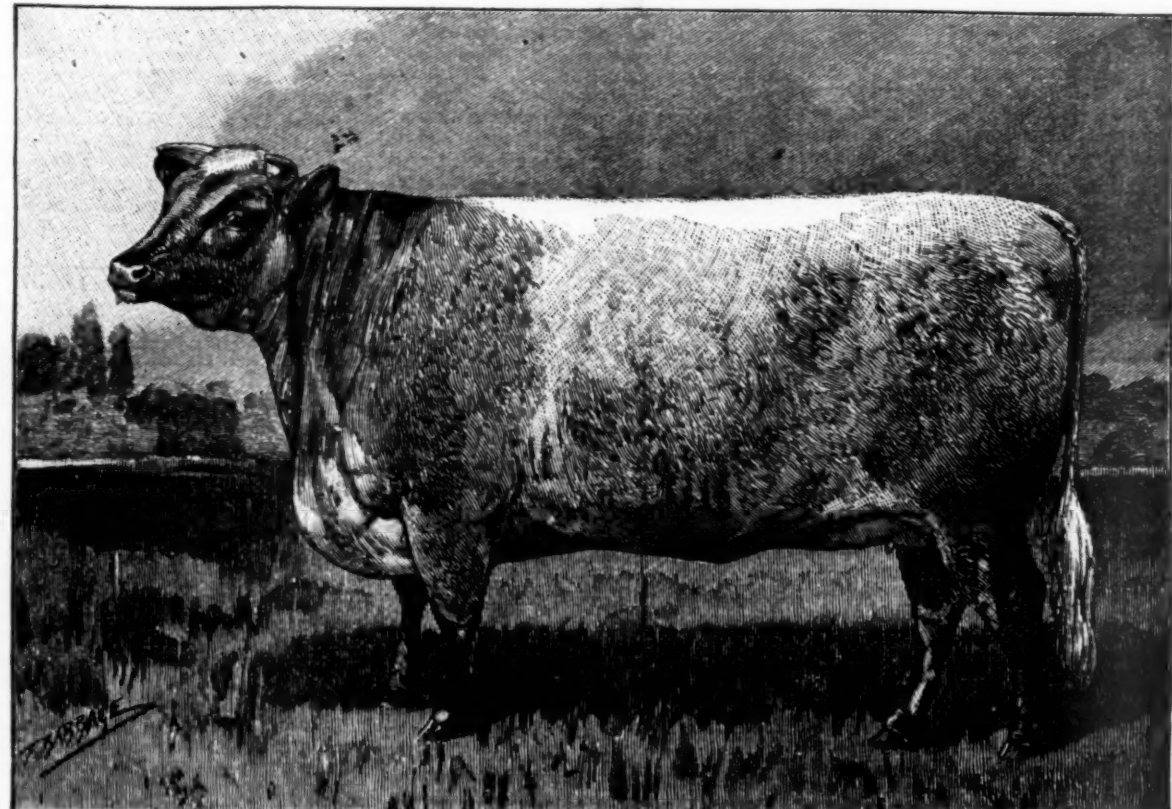
To a central New York farmer it must
seem rather strange that one should re-
port upon the condition of the growing
crops of that section, and omit hops.
Hops, to the farmers there, are what
tobacco is to the farmers of the Connecticut
River Valley. Not all in each section culti-
vate one of either crops, but the total inter-
est in the crop specially grown in the two
sections is very large. And I might have
said two weeks ago that to a down east
farmer the hop crop with its vines 10 to 15
feet high, looked fairly well, and was re-
ported to be by the native growers, al-
though the dry weather of May and early
June had its effect on many "yards."

To one who is used to seeing only hops
growing on two or three poles by his grand-
father's home, to furnish the bitter for a little
root beer and home-made yeast, the
"yards" in Osego County of 50 to 100
acres are great eye openers as to the
extent of the hop industry. But as I talk
with the smaller growers I am forced
to ask the question, does such farming
by the millionaire help the country, be it
either in producing hops or wheat, as it
would if done by a greater number of pro-
priators? Another indicator of the impor-
tance of the hop industry is in the signs of
the hop brokers in the larger towns, notably
at Cooperstown, where I was reminded of
the lawyers' and doctors' signs of an east-
ern county seat.

The fine village of Cooperstown is of
itself worthy of special notice by a traveler,
lying as it does beautifully between the
hills at the head of Osego lake. It has been
the home of a Clark family of mill-masters,
who have and are doing much for the place
in memory of the noted author whose
family gave name to the town,—one in the
gift of a unique and large public hall and il-
lustrary building, another a public park, in
the center of which is a novel monument to
Cooper's memory in an immense fit

much sugar. But sugar is not so dear as it
was 20 or 30 years ago, or even 50 years
ago, in the era before the civil war. Much
was said then about the sweets pro-
duced by unpaid slave labor, and many peo-
ple expressed their hatred of slavery by
doing without sugar, except that produced
by free labor. But the amount of green
apples that can be used in making pies is
not half enough to thin the fruit properly.
Sweet apples are only good when fully ripe,
either raw or cooked. When the sweet

meal on them. Those coarse butts would
be left in the crib. This might not be the
case when they were kept green in the silo.
But we find in the New York Tribune an
article credited to "Aurora," which gives a
new view of the subject, and we will
republican a few extracts from it:
"Incidentally it is being found that with
less ear development there is a larger cor-
responding amount of protein. At the Pennsylv-
ania station Mr. Armbury found that corn
planted in rows very thickly, even to the ex-



CHAMPION SHORTHORN HEIFER.

boulder supporting a bronze Indian and dog
The grave of J. Fenimore Cooper is in the
old style "church yard," a cemetery
through which the worshippers passed to
enter the church, as they do there to this
day, and over his grave is only a plain
native slate stone simply inscribed with
name and dates. The Cooper family are
now at least evidently all interested in one
compact section of the yard, and I counted
the stones to nearly 40 graves bearing the
family name, which I believe is now extinct
there.

The showers and sunshine with two nights
of steady rain in this section the past week
rueful how many farmers' minds, and
must assuredly give all cultivated annuals a
great benefit. But the fact cannot be dodged
that the hay crop will be short, yet the
calamity may be magnified as I believe it
will not be an unmitigated loss, though in-
dividual farms must suffer. But a short
crop this year will enable other farmers to
unload one to three years' crop or surplus
as it is scattered over the country. In this vi-
sion I see many stacks of old hay, in one in-
stance a dozen stacks on one farm, said to
amount to nearly 100 tons. And as buyers
pay only \$7 to \$8 delivered on cars, city
buyers that pay \$18 to \$20 are feeling some-
body well.

At Norwich, Chenango County, I was in-
terested to meet in Mr. Claude Smith an in-
telligent and "well-read" farmer, who, in
"York State," believes in "Down East"
ideas and seed potatoes, as he puts it. He is
an enthusiastic believer in your journal's
theories on the clover question, and
proves his truth in actual practice. He
considers clover hay first class for
fodder, and both food and medicine for sheep.
But I was specially interested in his ex-
perience in testing its use as a fertilizer, as
he showed me the most even and farthest
advanced large field of potatoes I had seen
this season, which were growing upon a
heavy clover sod ground turned over this
spring, with very little if any other fertiliz-
ing used. It is not an experiment with him
this year, as he has practiced it several sea-
sons with the best of results as to the crop
every way. He considers the early Mohican
and Carmen No. 1 two reliable and
first-class potatoes for this locality. A lot
of the former variety were carrying an excel-
lent style, full bloom on tops, and I noticed
many fields this season with a good sprink-
ling of blossoms.

The white daisy has a great hold of the
grass fields hereabouts. But it is not
worthless as hay it is claimed if cut early,
and the farmers this year are already doing
it, and in other ways will make the best of
the short crop of grass. H. M. PORTER
Richford, Toga Co., N. Y., July 3.

Thinning Early Apples.

There were so few apples last year that
the coddling moth did not find the opportu-
nity in many localities to make its usual
increase in numbers. For this reason
wherever apple trees blossomed freely this
spring the fruit will need to be thinned,
and the early kinds, which being ripe first
meet the worst attacks of the moth, will
require especial attention now. Usually
when the coddling moth is abundant
it will thin the early apples sufficiently.
But this year in some places there are not
early apples are usually small, and are
made still smaller than their natural growth
if crowded. Some of the sour apples make
good pies when picked green. The only
trouble with them is that they require so

much sugar. But sugar is not so dear as it
was 20 or 30 years ago, or even 50 years
ago, in the era before the civil war. Much
was said then about the sweets pro-
duced by unpaid slave labor, and many peo-
ple expressed their hatred of slavery by
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Farm Hints.

A good farmer we once knew surprised
his neighbors when he met them at the vil-
lage store and post office one winter day,
when the snow blocked the roads, by in-
forming them that he had been haying
that day. In other words, he had improved
his time by taking mowing machine a
hay rake apart, examining every bolt and
nut to see if they were in order, and find-
ing to the dealer for all parts that he
thought needed replacing or would be likely
to give out if they were given a hard day's
work or two.

That day in January helped to get his hay
early and in good condition as much as he
could have done in a July day, and perhaps
more, for if he had not sent for his parts
until July he might have lost a week of
a good season. The best part of beginning
your job is the getting "a real good ready"
before the start is made.

But every year we find many farmers with
no preparations made ahead. They must
take the busy time to do what might have
been done six months earlier, or they begin
without proper preparation and then lose
time after work, because of breakdowns and
hindrances which they are sure always
come in the worst possible time.
It is not in having alone that one needs to
make his calculations and preparations a
long time ahead. From the early spring
plowing until the last harvest of the autumn
some men are obliged every year to take
time to get ready for work, which they
should have spent in doing the work, if
they had been ready beforehand. My old
friend used to call that "trying to mak-
e themselves catch up with work after they
had allowed it to get a long way ahead of
them."

When we grow corn expressly for fodder
we used to sow it in drills, from 2 1/2 to three
feet apart, allowing stalks to stand for
three to nine inches apart, but intending to
average two or three stalks to each foot of
row. In this way we obtained a great deal
of fodder, not too coarse, and the cows
liked it, although not many ears ever
formed on it, and there would be a few
"nubbins," but not enough to tempt the
quarrels and mice to attack the shocks.

After the advantages of the silo were
known and people began to use them, we
heard and read so much about the advan-
tages of planting thinly, a foot or 18 inches
apart in the drill, so that ears might grow
to be out into the silo with the stalks, giving
them more nutritive qualities, that we began
to think we had been wrong. We had
tried to do as well as we knew how in the
matter, and if growing fodder corn to sur-
vive for winter use we should do it in the same
way, even if the stalks were not quite as
nutritious, for we did not like the very
coarse stalks which grow where the corn
was too thin in the drill. We did not like
them, because the cows evidently did not
like them, and would not eat them, even
when we cut them up and wet them and put

clusion of ear formation, produced nearly 25
per cent. more dry digestible matter than
with 10 to 12 quarts of seed per acre, and with
quite a noticeable increase of protein over
thinly planted corn. Mr. Haerter of Min-
nesota found that with the thinly planted
corn he got about 175 pounds of protein to
the acre, and with corn drilled so thickly
that no ears formed save a few "nub-
bins," he obtained 215 pounds of protein
and 34,000 pounds of green fodder with it.
In his inquiries the last winter
I found several men who thought that
little grain on well-grown stalks made the
most profitable silage, in fact, they were
convinced they did not see increased sil-
age in feed or milk when the rich-raised silage
was substituted for that which was quite
deficient in ears. In some sections I found
men who insisted that it paid to have a
stand by the feeding table of the silage cut-
ter and snap all of the ears they could."

The point is that more dry matter—
digestible—can be taken from an acre with
thick sowing of corn, and a surprising gain
is made in protein. To test this fully, the
Minnesota man planted corn in hills and in
drills, and in different amounts of corn per
acre, to see if there was any substantial
basis for the opinion that was gaining
ground against the thin planting of
corn for silage. The corn planted in
hills gave 23,400 pounds of green fodder,
3,800 pounds of dry matter and 382 pounds of
protein. Single-drilled corn gave 33,300 pounds
of green fodder, 7,000 pounds dry matter and
387 pounds of protein; double-drills, 33,120
pounds green fodder, 7,250 dry matter
and 613 pounds of protein; broadcast, 30,000 pounds
green fodder, 7,000 pounds dry matter
and 593 pounds of protein. Southern
corn, drilled one kernel each two inches
in rows 4 1/2 inches apart, seeded June
20, gave 55,000 pounds per acre, with
844 pounds dry matter and 647 pounds of
protein. The feeding showed that the pro-
teins and starches were as digestible as if
in the form of grain, and with this manifest
difference. There was a gain of over 3000
pounds of dry digestible matter; and at
three-fourths of a cent a pound this starch
would be over \$20. An excess of 2 1/2 pounds
of actual protein at 34 cents a pound would
amount to \$85 more, or about the total
cost of growing the crop, allowing a 4 d
like a new idea is the very late planting
of Virginia corn for silage later than June
15, with occasional barrowings to kill
weeds. By the time the corn is planted
weed growing is over—if the soil is not
again inverted—so that only two or three
harrows and cultivations will be needed
to promote the corn and conserve the mois-
ture of the soil. The matter is worth in-
vestigation and experiment.

This last method is very nearly that which
we followed more than 20 years ago in
growing corn fodder in drills, to feed out
green in the fall if the pastures grew dry,
or to cure and feed during the winter. The
only exceptions are that we used the Ball-
more round corn for seed when we could
get it, as we thought it grew a finer bot-
tler stalk than the Virginia or any other
Southern corn, and we liked to sow as
early in June as we could, although we
had moved off a field of June grass and
daisies when the white blossoms were all
out, and sowed it later than the middle of
June. We obtained a lot of very good fod-
der, using only a little phosphate in the
drill, from this run out 1 1/2 d, and we killed
the daisies, or most of them.

Star Poles or has been a half in his work in
1,004, last quarter in 304, seconds.

The Young of the Herd.

It is possible to ruin a good cow during
the first six months of its life. There is
enough in the feeding and care of the
calves to determine the future quality of
the whole herd. This fact is not at all
emphasized by those who care to
build up good herds. They breed good
cows to excellent bulls, and presumably
secure good calves. But something be-
tween the birth and maturity of the young
animals seems to ruin them. They do not
turn out to be what their beginning prom-
ised. What is the reason for this? I may
not always be able to answer the ques-
tion, but in very many instances the cause
is found in the neglect of the calves during
their tender age of six months or less.

To feed the calves properly one must
decide beforehand, and very early, too,
whether they are to be reared into dairy
or beef cows. If we are going to raise
beef cows the food of the calves must be
quite different from that given to the
dairy cows. Best calves require food
that will make muscle and fat. The ani-
mals must first get a good foundation of
muscle, and then fat can be laid on that
will be firm and valuable. As the char-
acters of these animals are determined
when very young, such muscle and fat-
producing food would ruin a cow for
dairy purposes, no matter if her parents
were from the very best dairy herd in
the land. The dairy cow is pre-eminently
a nervous animal. It has bundles of
nerves, and the food it feeds on promotes
this characteristic. It might be noted in
passing that owing to this fact the dairy
cow can stand less worrying and excite-
ment than the beef cow. Being a bundle
of nerves it is easily frightened, and its
milk supply temporarily at least checked.
The dairy cow is never a fat cow. The
two never go together. When a dairy
cow lays on fat rapidly it may be judged
that there is something wrong. Either
the food is too fat-producing, or the
animal is by nature a beef cow, and should
never have been reared for anything else.
Its presence in the dairy herd is a
mistake. The mistake of feeding the
calves wrong is more apparent in the
dairy cows than any others. They once
get into the habit of making fat, and it is
almost impossible to break them of it.
They will often continue to do so all through
the rest of their lives, and they are prac-
tically ruined for their work as dairy cows
created for by nature. The right feeding of
the calves is thus a very important work.

E. P. SMITH.

Kennebec (Me.) Farm Notes.

Since April we have had quite a drought,
so much so that our crops have been kept
backward to a considerable extent. The
grass crops are rather short, but lately we
have had fine showers, and light local rains
which have had good effect, and our crops
are making rapid strides.
Our hay crop will be light, as the long-
continued drought plucked it up so badly
that the late rains can only make a partial
remedy in many fields. However, we are
glad of the rain, for it has put a new face
on the prospects of the general farm crop, and
has brightened the farmers' hopes very
much; for all crops save hay and apples
may now make an average showing.

Corn is looking well, as the drought did
not materially damage the crop, and at this
writing (June 29) looking as well as usual.
A large area has been put into this crop,
and the areas in beans are also large.
The apple crop must be small, as this
county was badly infested with caterpillars,
both of the forest and tent va-
rieties. Many large orchards were entirely
stripped of their foliage, and this, too, with
a great deal of labor expended in fighting
them. Some localities were not so badly
infested, and the trees are looking fairly
well, but the showing for fruit is poor, and
we are only looking for about one-third of
a crop. This will be hard for the orchard-
ists here, as we only had a very light crop
last season. Kennebec County is a good
fruit country, and we feel the loss sadly
when the crop fails.

Small fruits are fully up to an average.
Berries promise well, such as strawberries,
raspberries, blackberries, blueberries, etc.
Sale of hay is better, and quite a large
amount of old hay remains in the farmers'
hands, and this will help out the light crop
of 1899.
Quite a large amount of building and
repairing is being done this spring and
summer, and our carpenters are doing
plenty to do, and at good wages. Good
farm hands are scarce, and men for hay-
making expect good pay. Butter, cheese,
eggs, etc., are selling fairly well.

M. E. FAUGHT.

Sidney, Kennebec Co., Me.

Live Stock Notes.

The National Stockman says that Col-
orado has enacted a law, to go into effect
next month, that "no inferior or mus-
tard shall be sold in Texas, Mexico, Cherokee,
or other inferior bull, and no scrub ram shall
be allowed to run at large." Even the J. r-
sey bull, though at the blue blood, is
class of with the scrubs in Colorado, and
any one is authorized to castrate any scrub
sire found running at large. Those who
do not wish to have their stock work them
dwell on the fact that if the working of the
law proves favorable, we may expect to see
it tried in other States where cattle run at
large on the great ranges, and where cattle
are valued as beef producers.

The drought is working so much injury
to the pastures that hay crop that we feel it
desirable to again refer to the importance
of growing fodder crops to feed green and
for hay. Last fall some of the
farmers were complaining that hay was so

abundant and cheap that it would not pay
to send it to market, and that if they kept
stock to eat it they would have no advan-
tage from that, excepting to turn the hay
into manure to grow more grass. They
asserted that there was no longer profit in
feeding young stock or in fattening cattle in
the Eastern States. Many declared that
they would not fill silos again, as they were
growing more hay than they could profit-
ably feed out.

We protested against all of these asser-
tions, and declared our belief that such hay
crops as that of last year were not to be
expected every year. We thought that
while hay was so low priced it would pay to
feed young stock and sheep, and to fatten
cattle, if they were not more valuable to
keep than they would be in beef, replacing
the poorer cows and old oxen with carefully
selected younger ones. And above all we
advised every one who had a silo to make as
much preparation to fill it as if there was
no surplus hay on hand and a demand for
it at \$20 per ton.

Our market reports have shown that we
were correct in expecting better prices for
hay this year than prevailed then, and a
good demand for well bred and well fed
young stock of all kinds, and we are glad to
learn from correspondents that many of our
readers thought we were right, and acted
accordingly. Very few of them, so far as
we have learned, have failed to plant corn
for the silo, and many of them have mar-
keted their hay upon four legs, in the form
of young heifers and steers, or have them
on hand to sell when they find the market
favorable.

It is probably safe to say that in Maine
and New Hampshire there are today 50 per
cent. more yearling and two-year-old cattle
than two years ago, and there is some in-
crease in the agricultural districts of this
State and New York. Now, with pastures
drying up and a prospect of a light hay
crop, the feeding question becomes a serious
one.

The scanty pastures may be helped some
by the use of wheat bran or middlings for
the young stock, and the same mixed with
richer grain, as corn meal, gluten or lin-
seed meal, for the milch cows. It is not too
late to sow fodder crops. We have had a
fair crop of corn fodder from corn sown in
July, and some good crops of Hungarian
grass and millet sown even as late as
August, though we should prefer sowing
these crops in May or early in June. The
late-sown crop may not be quite as heavy
as an earlier sown crop would have been,
and if cured for winter use it may not have
as good weather for curing it properly, but
a half crop may prove better than no crop,
and it is now too late to talk about sowing
early.

Rye and barley sown together as late as
September will furnish a fall feed that will
save an early attack upon the hay mow or
the silage pit, as they stand quite severe
frosts without injury and make a fair hay,
though not the best, requiring more grain
with them to make a well balanced ration
than does good English hay.

For young stock, sheep and stock hogs,
we would certainly try the dwarf Essex or
dwarf Victoria sows as a pasture. It may
be sown at any time up to the middle of
August, and is best grown in drills 2 1/2
to three feet apart, using 2 1/2 to three pounds
of seed to the acre. Or another way is to sow
three pounds per acre broadcast between
the rows of corn at the last time of culti-
vating. It will be ready to turn stock into
in from six to eight weeks from sowing,
and if among the corn the animals will not
touch the corn while they can find rape.

If the animals are allowed to get a fair
feed in a pasture in the morning, and not
tormented on the rape until the dew is off, and
only for an hour or so at first, gradually ex-
tending the time, after a week they may be
allowed to go to it as they will without
danger of ruin. They should have opportu-
nity to run out into another pasture when
they wish to, which they will as soon as
they have eaten enough. Lambs and fat-
tening hogs do better if they have some
wheat bran every day when on the rape, but
this is not necessary for sheep or growing
calves.

It is reported that last year more than a
million acres of rape were grown in this
country, and if sale of seed is a criterion for
judgment, there may be 10,000,000 acres this
year. And yet it was almost unknown here
five years ago, excepting in some parts of
Canada, where farmers had learned the
value placed upon it in England. The gen-
eral opinion seems to be that where rape is
grown and fed where it stands, the drop-
pings of animals, even when a part of them
are taken out to the pasture field, will leave
the land in better condition than before. It
furnishes feed until the ground freezes in
winter, and as most of the animals prefer
the stalk to the leaves, the latter fall to en-
rich the soil.

But we now say to farmers, do not put
with young cattle or sheep unless at their
full value, if there is any possible way to
grow any one of these fodder crops. Plow
up the dry pasture, sow any of the moving
fields that are run out, or where the grass
is killed either by last winter's freezing or
the present drought, or by the white grub
at the roots, of which we have heard no
complaint yet this season, but expect to
dry weather hold much longer, and prepare
to have enough feed all there is room for
in the stable, if possible.

The Boston automobiles are beginning to
"cut up shins." One of them got nearly
the other night, jumped off the street on to
the sidewalk, struck a post and broke it off,
then, imitating a horse suffering from an
attack of colic, laid down and rolled over.
Upon righting and examining the "cranky
cutter" it was found to be injured but
slightly, and the driver, who was thrown to
the ground in the early stages of the fracas
was not much hurt. Last week was a bad
one all over the country for the automobile
brigade.

AGRICULTURAL.

A Permanent Profitable Dairy

Every dairyman should ask himself the question, whether he is building for temporary or permanent results. Temporary work, while it may yield present profits, provides nothing for the future, and is a broken reed to lean upon.

Take breeding for example. Here we have one of the most important functions relating to the dairy art. The man who does not look at least ten years ahead when he begins to build up a profitable dairy by improved breeding will never make a permanent success at milk production.

Do not acquire a full complement of cows of any one breed as an experiment. Know definitely in the beginning whether full-blooded Jerseys, Holsteins, Guernseys, or grades of one or more of these breeds is best suited to your wants. Then let nothing stand in your way of breeding with an eye strictly to the future.

At this season of the year the subject is all important, on account of cows going to pasture. Many make the mistake after selecting a good breed of employing to young bulls, which results in cows that do not come up to the expectations of their pedigree.

I think that a bull should be at least three years old to beget calves of full vigor. You cannot have a permanently good dairy until you learn to do things right, and this is one of the main points. The bull should not be allowed to run with the cows, but you should have such a thorough and minute supervision over your dairy that a cow in heat will not escape your notice and you know exactly when she takes service.

This should be made a matter of record, being placed opposite the name or description of the cow. A neat plan that I have seen in practice is to tack over each cow's stall or stallion a square of white paper, on which is written the date of her service and the expected time of calving.

This saves a great deal of guesswork and uncertainty, and insures the drying off of the animal at a certain period approaching calving and placing her on pasturage.

If the bull is not allowed to run with the cows at this season what are you going to do with him? I hope you do not contemplate shutting him in a dark stable to bellow and starve, as I have seen too often done. Nothing will make him more ugly or impair his vigor than such a course.

The bull should have air, sunshine, exercise and plenty to eat and drink. If you do not work him, at least keep him in an open yard or paddock, with his nose ringed, of course, so you can handle him without danger.

Remember, that the future stability and value of your dairy depends as much upon how you treat the sire at the head of your herd as upon your attitude toward the cow.

In laying the foundation for a profitable dairy for the future, you may not more than get a good start this year, but that foundation has got to be laid sometime, or you will continue season after season to be a very poor amateur at the business, and perhaps die with a mortgage on your farm.

I have always contended that in farm work it is much easier, as far as manual labor is concerned, and less expensive, to do things right, with a definite object in view, than to follow the slipshod, unprofitable course so often pursued.

If you wish to have a better dairy five years from now than you at present possess, you have got to take some definite action this season. Begin by an improved system of breeding and grow into a good dairy, which is the least expensive and most satisfactory way for acquiring one.

Thus, at the end of a few years, without the expenditure of a single extra dollar, unless for the original purchase of a blooded bull, you will find yourself possessed of a herd of cows worth double in value, both commercially and aesthetically, what you now own.

Many dairymen recognize the truth and value of this in a half-hearted way, but they never equalize their own herd and make the broad start necessary for its successful consummation. Out of a herd of fifteen or twenty milk cattle, perhaps five or six will be grades, and the rest common stock, showing such a feeble attempt at improvement that it does not add materially to the owner's income.

I tell you that permanent dairy improvement must be mapped out on broader lines; that these, for the most part, depend upon the superior man who is forced closer to be what he is, and not what he would like to be.

Breed cows first and feed next, in the list of essentials that a man must keep paramount in his mind who really desires to build up a dairy with its foundation on bedrock.

GEORGE E. NEWELL.

Dairy Notes.

The Iowa dairy commissioner in his 12th annual report sends out the following practical suggestions, which are as valuable in other States as in Iowa, and contain the plot of a long experience.

It is a good thing to know how to do it, but it is a far better thing to do as well as we know.

Each dairyman should strive to produce the best and sweetest of milk, and then see to it himself that it is delivered to the factory in the best possible condition.

Own and milk good cows. If you have poor cows send them to the butcher. Never use or sell milk from diseased or unhealthy cows. It is dangerous even to feed it to the pigs.

Keep the cow warm and dry. Feed clean, bright food in variety to produce good results.

When pastures are as dry as now, the grass dries up while the weeds remain green, especially that very bitter weed known as the Roman wormwood, common in nearly all old fields. This weed seems to flourish best when all other vegetation is at a standstill from lack of moisture. The cows usually avoid it or eat but small quantities of it when mixed with grass, but when hunger drives them to it, they will eat it and will give it flavor to the milk and cream, and we do not doubt but if the animal was killed after a week or two of such diet, the same flavor would be found in the flesh.

There are other weeds of quite as bitter which are sometimes eaten, and we have seen the leaves of birches and other trees or shrubs eaten by cows in scanty pastures, any of which would be likely to flavor the milk unpleasantly. We need not seek far for a remedy. Remove the cows from the pastures where weeds are more abundant than grass, and give them fodder either in a better field or at the barn, even cutting clover and corn fodder for them until they are not tempted to eat weeds.

This taint from weeds will usually be noticed as quickly in the milk as in cream or butter, but there is another bitter flavor which is often not detected until the butter has become a few days or a week old, and develops rapidly after that time. This is also most frequent in a dry season, though we have been asked to account for it nearly all seasons of the year. In most cases we have traced it directly to the use of impure or stagnant water.

When brooks, ponds or wells grow low, impurities existing in it become much more powerful than when they are more diluted, or when the swift-running stream carries them away. The danger is that the water in places of the cows, and see that they do not have to drink out of stagnant puddles, nor to wade in and stir up decayed and decaying vegetable matter, and other deposits that accumulate at the bottom of slow-running water.

We have in some cases been obliged to think the trouble arose from the ill health of the animal, and probably a diseased liver, but in one case at least, after deciding that the water supply was pure, being from a good well, we found that one cow did not drink with the rest when there was a dirty puddle of water in the barnyard, filled with liquid manure. It was a case of depraved appetite, possibly the result of some disease. When her milk was not used with that of the other cows the butter had a good flavor again, and kept it. And after she was prevented from drinking at the puddle, and had been well physicked out with Epsom salts, and then given salt to make her relish good pure water, she soon became all right again.

At a Farmers' Institute in Michigan last winter, the speaker sent by the State, Mr. C. C. Little, stated that a good cow was one which would give her owner an income of \$100 a year, with butter not more than 25 cents a pound, and not less than 20 cents. In response to an offer of \$100 each for such cows he said he had 10 such cows and he paid more than \$100 each for some of them, and he would not sell them for \$200 each.

He estimated the cost of food for such a cow would be about \$35 a year. He doubted if it would be profitable for a man to build a silo unless he had at least 10 cows, as it must be fed from the silo at the rate of about eight inches a day to keep that on the top in good condition, and he thought those who did not make dairy farming a specialty should go out of the business, as they were likely to be keeping cows at a loss.

We do not agree with either statement, as we have seen silos a good success for four or five cows, the silo, however, being made small enough to allow about eight inches to be used off each day.

Many cows are kept at a less cost than \$35 each a year, reckoning the coarse food at the value at which it would sell on the farm, and many on our milk farms are so fed that they cost more than \$35 per year, where all the feed is bought for them, and yet they pay for that and yield a fair profit beside.

And some who have a market for milk at or near home make quite a much per head on one or two cows. Mr. Little does on his. But the cow that will produce from 400 to 500 pounds of butter in a year, which was the amount on which his figures were based, must be a good one and well fed.

His cows are pure-bred Jerseys, but we once owned one not Jersey, possibly, by her looks, with a share of Ayrshire and Shorthorn blood in her, though classed as native, which would produce about 400 pounds of butter in a year, on only light grain feeding in winter and good pasture in summer.

Bees and Honey.
N. E. France, State inspector of apiculture for Wisconsin, in a paper read at a Farmers' Institute in that State, boasted that Wisconsin produced as many pounds of honey per colony and of as good quality as any State in the Union. He also claimed that ladies made successful beekeepers. One in that State produced from her own colony 50,000 pounds of honey and another 30,000 pounds, while other ladies had raised and sold 10,000 queen bees or more during the year.

Certainly these are good records for woman's work in what is called one of the good Northern States. There should be a good margin for profit in selling 25 tons of honey or a thousand queen bees.

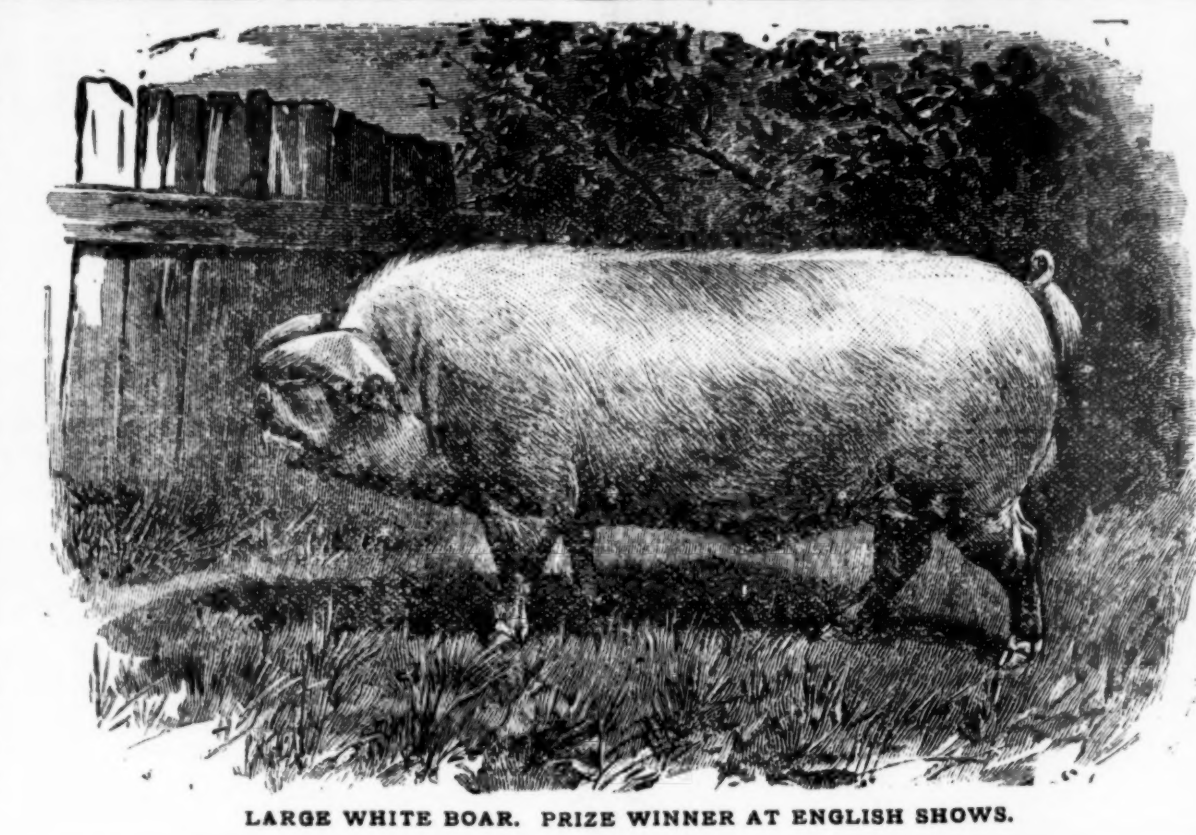
He gave directions for rearing queen bees which may contain useful suggestions for some of our readers. The beekeeper should select his best colonies for that purpose, as thereby he will be improving the character of his queens and of the colonies.

"The Best is the Cheapest."

Experience teaches that good clothes wear longest, good food gives best nutrition, and a good medicine that cures disease is naturally the best and cheapest. Hood's Sarsaparilla is the best medicine money can buy, because it cures when all others fail.

Poor Health—"Had poor health for years, pains in shoulders, back and hips, with constant headache, nervousness and no appetite. Used Hood's Sarsaparilla, gained strength and can work hard all day; eat heartily and sleep well. I took it because it helped my husband to whom it gave strength." Mrs. E. J. Giffels, Moore Lake, Minn.

Hood's Sarsaparilla
Never Disappoints
Hood's Pills cure liver ills, the non-irritating and only cathartic to take with Hood's Sarsaparilla.



LARGE WHITE BOAR. PRIZE WINNER AT ENGLISH SHOWS.

they produce. From this colony, when the honey harvest is well begun, remove one comb of brood and put a new comb in its place. The queen will at once nearly fill it with eggs.

This comb taken out should be put into narrow strips, and each strip, by means of a little wax, is fastened into a frame that has some comb in it. With a small stick remove every other egg at least, and then give the frame to a strong queenless colony. They will probably so care for it as to have a fine lot of capped queen cells, far enough apart so that each may be saved without injury to the others. They will be ready to remove in about 15 or 16 days from the egg.

One of these capped cells, with a little food, is put into a frame with foundation or block enough to fill it, and then hang in a strong colony. In from two to four days after hatching they may begin to a strong colony which has been without a queen for at least three days, and if any queen cells have been formed there remove them. If this is done at the height of the season there will be but little swarming; the bees keep on working and the queen makes a vigorous colony, which will be likely to overwinter if they are not robbed too closely of their honey.

Of course the object of all this labor is that queen bees may be sold, and new ones supplied to the colony, from those so raised, and as tested queens or those which have begun laying are in good demand, one who has a large apary can raise a thousand of them in a season, almost without hindering the production of honey.

Bees sometimes appear unwilling to go up into the supers to fill the cells, but they will prepare to swarm, and if the queen is not ready to lead them out will hang on the outside doing nothing, even when there is a good honey flow. In that case, perhaps as good a way to manage them is either to put all the combs into an empty hive, filling the old hive with frames of old comb or foundation, and put that with full comb directly on top of the one with empty comb, or to remove the bottom board of old hive and put the new one under it.

In putting old comb or foundation into frames it is better to wire them when it is put in. It makes it safer against breaking down in extracting the honey or handling it for any other purpose.

It is, we think, most frequently the yellow Italians that are so disinclined to go up into the supers when they find an empty cell in the brood comb in which to deposit their honey, and they also will avoid foundation if they can find comb. They cannot be called lazy, for they are busy gatherers of honey and of pollen, but they do not seem to have what may be called the building instinct. Perhaps the fault is hereditary with them.

By putting the brood comb above them they may find their way, and they do most excellent work in producing extracted honey. In fact, we think it is from colonies of this kind that some of the large records have been made. They will also fill sections if once they get to working in them, and the super is raised up when about half filled, and a super with empty comb is placed beneath it. By the time the sections in the upper super are filled and capped, the one below it will be half full, and ready to have another placed beneath it. Or even there may be three supers, one above another, if the colony is a large one.

Professor Day advises the planting of special crops to furnish honey for the bees where many are kept, as the bees will succeed much better if they do not have to go too far for their supplies. They may even desert the hive and seek a looser colony. He says the lightest colored honey includes that from clover, alfalfa, white sage, thistle, raspberry, Linden and manrova. The blossoms of the apple, orange and golden rod also produce a light-colored honey with usually a decidedly yellowish tinge, while buckwheat yields a dark-colored honey.

Among the special crops which he thinks might be planted for the bees he names mustard, asparagus, cotton, clover, pepper mint, parsnips, rape and pithers. He also says that among the trees which furnish abundance of honey for the bees are the alders, locusts, horse chestnuts, poplars, Lindens, catalpas, sourwood and eucaalyptus. His lists cover both Northern and Western States, and among them are some crops which are profitable in other ways than as honey producers.

We think the list might be much extended, and include many more crops profitable of themselves, which would be found to add to the honey crop. A most any of our garden roots furnish honey when set for growing seeds. Certainly, cabbage and turnips are, we think, as much visited by the bees when in blossom as the rape. In California it is considered a privilege to locate an apiary near a large bean field.

One of the greatest needs of bees is water, and unless there is water near by the apiary to which they can safely go, there is no better way to supply it than to have a pail or tub from which it can drip down upon a board, and a ribbed board, like the old-fashioned washboard, with a drip water on it, would be almost covered with bees all day, if near an apiary.

Can art, alas! or genius, guide the head Where truth and freedom from the heart are fled? Can lesser wheels repeat their native stroke, When the prime function of the soul is broke? —Kinsale.

Boston Retail Markets.

There is but little game on the market, the supply in cold storage being well worked down, while nothing new is looked for until those birds come in season July 15. A few brant from the Provinces can yet be found at \$1.75 to \$2 per pair, and some mallard ducks from the West at \$1.50 per pair. Grouse from cold storage are about gone, the price being about \$2 per pair when they are to be had. Plover are past, as far as getting present supplies are concerned. About 100,000 are coming steady and sell at \$3 per dozen, while tame pigeons are firm at \$1.75 to \$2 per dozen, with stall feed at \$2.25 to \$2.50 per dozen. The price of sucking pigs is unchanged, they costing \$1.50 to \$2 each, as to size.

The supply of poultry on the market is seasonably liberal, with prices about the same. Large South Shore roasting chickens continue firm, with the price at 35 to 38 cents per pound for such, while broilers are costing about the same price. Choice frozen turkeys are coming 15 to 20 cents per pound, with the range down to 15 to 16 cents. Best frozen green geese cost 15 to 20 cents per pound, with Western at 15 cents and some green geese coming in at 30 to 33 cents per pound. Ducks range up to 18 cents per pound for choice, with the range down to 14 to 16 cents, while young ducklings cost 20 to 22 cents per pound. Philadelphia capons command 25 cents per pound, with Philadelphia chickens at the same price. Choice Northern fowl cost 17 to 18 cents per pound, with Western at 16 to 18 cents.

The market is fairly supplied with spring lambs, which are costing 25 cents per pound for hindquarters, and 24 to 26 cents per pound for forequarters. Fall lambs remain at 20 cents per pound for hindquarters, with loins at 20 cents, while about 124 cents per pound buys the forequarter. The cost of choice veal sweetbreads is 40 to 65 cents, with about 25 cents for each of the calves' liver is costing about 30 cents each. Short chops from lamb or fat mutton are yet costing 25 cents per pound, with long cut chops at 17 cents. The cost of choice cutlets of veal continues at 30 cents per pound, while a fillet of veal is yet being sold at 16 to 20 cents per pound, while a leg will cost 20 cents per pound. Loins chops remain at 25 cents per pound.

The market for fresh beef continues steady with prices not materially changed. The price of sirloin steak remains at 23 to 25 cents, the latter for porterhouse, while the first cut of the ribs continues at 23 cents per pound. The range for roasting cuts is from 25 cents for porterhouse down to eight to 10 cents for chuck roast. The cost of round steak holds at 23 cents for top of the round, while a cut across the round, taking in both top and bottom, is quoted at 17 cents, and for the lower end of the round 124 cents. For the face of the round roast the cost is 15 to 16 cents per pound. Corned and salted tongues are firm at 15 cents, with smoked tongues at 18 cents per pound, while a fillet of veal is yet being sold at 16 to 20 cents per pound, while a leg will cost 20 cents per pound. Loins chops remain at 25 cents per pound.

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Batter continues in fair supply, with prices about steady. Best table grades, in the upper super are filled and capped, the one below it will be half full, and ready to have another placed beneath it. Or even there may be three supers, one above another, if the colony is a large one.

Professor Day advises the planting of special crops to furnish honey for the bees where many are kept, as the bees will succeed much better if they do not have to go too far for their supplies. They may even desert the hive and seek a looser colony. He says the lightest colored honey includes that from clover, alfalfa, white sage, thistle, raspberry, Linden and manrova. The blossoms of the apple, orange and golden rod also produce a light-colored honey with usually a decidedly yellowish tinge, while buckwheat yields a dark-colored honey.

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Boston Exports and Imports.
The exports from Boston for the week ending June 30 were valued at \$1,970,997, and the imports at \$1,027,263. Excess of exports \$943,734. For corresponding week last year the exports were \$1,717,837, and the imports were \$661,889. Excess of exports \$1,055,948. Since Jan. 1 the exports have been \$66,875,552 and the imports \$31,889,711. Excess of exports \$35,317,847. For the first six months in 1898 the exports were \$62,767,731, and the imports were \$38,621,075.

975. Excess of exports \$33,944,806. Of the week's exports \$2,626,972 went to England, \$17,740 to Ireland, \$9030 to Scotland, \$24,930 to Nova Scotia and the Provinces, \$138,886 to British possessions in Africa, \$7820 to other British possessions, \$49,012 to Germany, \$41,545 to Netherlands, \$24,164 to Sweden and Norway, \$10,079 to Belgium, \$11,163 to Russia, and smaller amounts to other points. The principal articles of export were provisions \$1,330,807, breadstuffs \$387,160, live animals \$231,110, cotton, raw, \$95,747, cotton, manufactured, \$7089, leather and manufactures of, \$216,158, iron and manufactures of, \$67,842, wood and manufactures of, \$55,029, machinery \$46,335, agricultural implements \$36,628, spirits \$119,498, tobacco \$23,570, tallow \$17,934, paper \$14,490, drugs and chemicals \$8,773.

Boston Fish Market.

There was a lively trade in fresh fish of the higher priced sorts on Monday, and prices were well maintained nearly all day, but there was an ample supply and prices were lower in afternoon, and about where they started after the glorious Fourth. Market cod is selling at 14 to 24 cents a pound, and steak cod at 14 to 4 cents. Pollock at 14 to 20 cents and haddock at 24 to 30 cents, with hake for 14 to 20 cents. Cusk at 2 to 3 cents and flounders 3 to 5 cents. Good halibut steady at 12 cents and sword fish at 20 cents a pound. Native mackerel 17 to 19 cents each for fair sized, and Spanish mackerel at 18 cents a pound. Bluefish a little lower, now 10 to 12 cents, with lake trout the same and sea trout dall at 5 cents. Brook trout in demand at 50 to 60 cents a pound. Butterfish 12 cents, weak fish 8 cents and scup 6 cents. Sea perch 15 cents a dozen. Striped bass quiet at 10 to 12 cents, and a few black bass at the same. Salmon sold at 25 cents a pound in the morning, but dropped to 20 to 22 cents before night. Monday. Tongues and cheeks 10 to 12 cents and eels the same. Frogs' legs 40 cents a dozen, and soft-shelled crabs 75 cents. Shrimps 40 cents a quart. Lobsters scarce and higher, 15 cents alive and 22 cents boiled. A quiet trade in oysters and clams, with prices unchanged.

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Or discomfort, no irritation of the intestines—but gentle, prompt, thorough healthful cleansing, when you take

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The Story of Plant Life.

By JULIA MACNAIR WRIGHT.

Few persons possess the skill to treat scientific subjects in a manner that is practical and at the same time pleasing and attractive to the ordinary reader. Mrs. Wright has strong claims to this distinction. Her charming little book is divided into twelve chapters, as will be seen by the table of contents, and devoted to plants that are in evidence during that month: "The Story of the Root" (January), "The Story of the Stem" (February), "The Hope of Trees to Come" (March), "When the Woods are Leafy Green" (April), "The Beauty of the Flower" (May), "Solomon's Rivals" (June), "Plant Partnerships" (July), "Fruit and Motion" (August), "The Fugitive of the Year" (September), "Bringing Forth Fruit" (October), "The Sleep of the Plants" (November), "The Signs of the Immortals" (December). Her treatment of root, stem, leaf, flower and fruit are pleasing and practical. Her discussion of the utility of plant life, food, clothing, medicine, houses and sanitation are equally suggestive and interesting. The book is designed for general reading, and is also admirably adapted for class use as supplementary reading, or as a text book on the subject. Cloth binding, 85 cents. Sold by all bookstores, or sent prepaid upon receipt of price. Address

MASSACHUSETTS PLOUGHMAN, Boston, Mass.

Veterinary Department.

Questions and Answers.

Q. W. C. Connecticut: I have a four-year-old mare that has had a hair on the end of her tail. On about two inches of the end they break off, leaving half an inch or less of hair. Kindly inform me what causes this and a remedy for the same, and whether they see a hair on the tail of a horse.

A. Answer: It would be hard to determine what the trouble is with the mare's tail, whether it is the result of an injury or skin disease. You might try the following: Cleanse the parts thoroughly once a day and keep them wet with a solution of creolin, using one ounce to a quart of soft water. This will have a tendency to allay fever and check the formation of pus.

Subscriber, Connecticut: I have a well-bred speedy mare that is all right except for a spur. She goes a little lame when starting off, but after being driven some this trouble disappears entirely. Would you advise breeding her to a good, sound to her?

A. Answer: I would not advise breeding the mare to her present condition, as the tendency to transmit the trouble would be very great.

F. E. A. Pennsylvania: I have a five-year-old horse that has 2,300 speed and is a quite good trotter. On driving him he has a lump on the side of his neck. When going at a three-minute clip he shows lameness in the right hind leg, and when going fast he can't throw the leg within six inches as far as the other hind leg. It is very lame when walking or going at about a four-minute gait. He is as sound as a dollar, and I use him for a road horse altogether. I can't find any fever or local any spot where the lameness comes from. Can you tell me where it is, how to treat it, and if he will be able to go sound at the top of his speed?

A. Answer: It would be impossible for any one to locate the lameness in your horse from the description given, and I should think it would be a good plan to call in a competent veterinary surgeon and have him make a careful examination, and possibly he may be able to locate the trouble, or if you will give us more minute particulars we will try and help you.

Bolton, Mass.: (1) I have a mare that seems to be threatened with fever. She coughs a little and shows symptoms of this trouble in her breathing during the past month. (2) Another mare I have has a lump on the near side of her throat about the size of a small hen's egg. This lump is movable and is not at all sore. It does not show when the neck is moved, and, in fact, is hardly visible at any time. It does not affect her breathing any, and she is as sound as a dollar. Is this likely to become larger? Kindly advise what is best to do for the above and oblige.

A. Answer: (1) Fevers in horses can be greatly modified by careful attention to diet, etc. The hay must be shaken up to get rid of all dust and sprinkled with water. The oats must be sifted and slightly moistened. Do not buy feed water early in the morning, but give plenty of water at night. Also give her two drams of Fowler's Solution morning and night after feeding. By following these instructions you may prevent serious consequences. (2) This enlargement you refer to is the mare's throat is a natural formation and will not increase in size.

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MRS. GOODNOW, 714 Centre street, Jamaica Plain—tumor of the neck.

MRS. TABRELL, 616 Centre street, Jamaica Plain—breast tumor.

MRS. BARTLETT, 144 Grove Avenue, East Providence, R. I.—breast tumor.

BENJAMIN R. DODGE, 388 Cabot Street, Beverly, Mass.—cancer of the liver.

MRS. KILTON, Boston, Mass.—breast tumor.

MRS. KISSICK, West Walnut Park, Hoxbury, Mass.—cancer of neck.

MRS. EDWARDS, 95 Woodward Avenue, Lowell, Mass.—cancer of neck.

MRS. J. A. MILLER, JR., 241 Federal Street, Providence, R. I.—cancer of breast.

MRS. DANIEL M. THOMPSON, Winchester, N. H.—cancer of the throat.

POULTRY.

Practical Poultry Hints.

One of the chief difficulties in rearing young turkeys seems to be that they sometimes have the gluttonous appetite of the young duck without the digestive power to make use of so much food. In part this must be overcome by care in feeding little and often, and in part by allowing them to exercise and thus to stimulate better digestion.

The natural habit of the turkey is to feed largely upon insects of its own catching. We have many a time watched with much pleasure the advance of a flock of three or four old ones, and their flock of young as they marched forward in line of battle, as it were, to a pasture or stubble field where the grasshoppers had come out in abundance. There was a beauty and a precision in their steady advance, and the perfection of their alignment, which was attractive to an old soldier, independent of the knowledge that his fields were being cleared of insect pests, and the hoppers being rapidly converted into turkey meat, which would presently have a market value.

If one could get a satisfactory number by allowing each turkey hen to incubate her eggs when she was ready and care for her own young, there would probably be less loss by disease than we have now, but if we take her eggs away, and thus induce her to lay 4 eggs instead of 15, the temptation to intrude the earlier eggs to hens for hatching is too great.

It was our practice to keep the hen with turkey chickens up every night and until grass was dry the next morning, until they were about four weeks old, feed lightly when in the coop, and if they seemed to find any insects, give but little grain during the day, or until they returned to the coop at night. This kept them foraging during the day, but encouraged them to return at night for safe keeping, and we lost but very few, more by accident than by disease.

After they are from two to three months old they may roam at will, and in a grassy field they will scarcely need any food in the yard, and they will find it, like, however, to keep up the evening feed, that they may be home every night, and we think after hunting all day they deserve a little corn, and grow faster for having it every day. If they do not find enough in the field to satisfy their appetites they will appear at the feeding place earlier and often.

When young turkeys or old ones appear to be unusually greedy at feeding, not only refuse to give them as much as they will eat, but ascertain whether they are or are not free from lice. We do not think turkeys are more subject to lice than hens, but we do think they show the trouble much more when they are present, and that more young turkeys die from this cause than from any of all diseases they are subject to. The large louse on the top of the head kills the young very quickly, but the old one gradually eats away, and is willing to stir much, and while eating beautifully if others do not drive it away from the food, it will grow lean.

In such cases, perhaps, there is no better application than to hold the bird by the legs, hold downward, and dust insect powder among the feathers. Or, an application of oil, not kerosene oil, but some sweet oil, fresh lard or butter, on the head, under the wings and near the root of the tail, may prove equally efficient. At whatever way they are destroyed or driven off, it may be necessary to repeat it more than once, at intervals of about a week, to destroy any which may have hatched out, or which may have come on them from contact with other birds, or even from nest and roosting places.

If no large lice are seen there may be the small red mites which require keen eyesight to detect. The insect powder brings them out very quickly, however, and often in such numbers as to make it appear that the very dust is crawling among the feathers.

A writer in American Gardening praises sawdust very lightly as a litter for the floor of a henhouse. It is light, clean, easily handled, and serves very well as material for mixing with the droppings under the roosts, but we do not like it, for two reasons at least. When we want to scatter grain in the litter to make the hens scratch for it, they will gather particles of the sawdust with the grain and they cannot digest it. And we do not like to put out the sawdust where we want to use the garden, strawberry bed and upon grass ground.

If we could have just what we want every time, we would have from six inches to a foot in depth of dry sand. We do not mean sandy loam or road dirt, though they may be used, but we would have clear plastering sand, or we could obtain it, or sand from the beach. Cover that with three or four inches of chopped straw. Rake the straw off and put in a new supply once a week, and at each time of doing so, if the sand is large in proportion to floor room, turn the sand over a little, occasionally going nearly to the bottom of it. Then we should feel confident that, if other care was right, we would have healthy hens, and very spring obtain fertilizer as strong as we desired to use on any crops.

A neighbor uses coal ashes instead of sand, and it proves very good as a substitute, but for every one who has a Cape Cod sand hill to go to.

"If I am going to have broiled chicken I want a good one," she said, and she selected a pure bred, Barred Plymouth Rock, that gave promise of being worth four times as much next fall as the others of the flock, which were half Rocks and the other half mongrels of a very mongrel lot. She had raised the chickens and it was her privilege. The year before she had obtained a setting of Rock eggs and she had the cockerel and one hen to keep over winter, with the mongrel chickens. She probably took no pains to save the eggs from her one pure-bred hen for setting, or perhaps she selected them for setting because they had a brown shell. She killed and cooked her best chicken. She is in a fair way to make her mongrel flock more thoroughly mongrel several years ago, he tried hundreds of varieties of garden vegetables from the result of finding many kinds masquerading under the name of some popular varieties, and also finding old and well-known sorts being sold at extravagant prices under new names.

His work in this direction resulted in a weeding out of a great many names from the seed catalogues of that day, but there is opportunity for more work of the same sort now, and no farmer can do it as well as the experiment station could do it, without considerable expense. He planted or sowed seed of all suspected kinds on the same day in similar soil, and noted date of germination, of blossoming, and of reaching a condition fit for table use, with all other characteristics, and thus found many identical though sold under names very different and at widely different prices, and he found differences in seed sold by the same name by different dealers.

Poultry and Game.

There has been but small sales of poultry this week. Broiler chickens are scarce, and large roasting chickens are 25 to 28 cents. Western broiler chickens are 25 to 30 cents. Small demand at 15 to 20 cents. Fresh killed small broilers, and good ones sold at 12 cents a pound very readily. Eastern young ducks are from 17 cents a pound, with Western and packed ducks or geese at 10 to 12 cents. A few Western turkeys in cold storage at 11 to 13 cents. Live poultry sold at 12 to 15 cents for fowl, and 15 to 20 cents for chickens. Live young ducks this week at \$1.00 a dozen. Selected large turkeys at \$2.25, but mixed lots were sold from \$1.25 to \$1.75. A little game in cold storage yet, but no fixed quotations, as

dealers would like to close it out, and there are only small lots. Good roasting pigs from \$1.25 to \$2.50 each.

HORTICULTURAL.

Orchard and Garden.

The forest tent caterpillar is invading orchards and fruit trees as well as the sugar maples and shade trees in many sections this year. As they build no nests like those of the tent caterpillar they are more difficult to destroy, and there seems to be no remedy for them but spraying with Paris green when they are young. The difficulty lies in the fact that when they are noticed they have usually stripped the foliage from the tree or a part of it, and by that time they are so well grown that they have reached the point where Professor Munson says they seem to grow and fatten on Paris green.

They also leave the trees they begin work on, and migrate to others, and while a person is spraying a tree where they have been, no small part of them may be at work in some other tree or trees near by, where they will not be noticed until the limbs begin to look bare. The Maine Farmer says they may be prevented from going up the trunk of a tree, by binding a piece of paper around the trunk and smearing that with a mixture of grease and powdered sulphur, using enough sulphur to prevent the grease from softening and running down the tree. They will not pass the line, and the editor says he has seen the trunk of a tree and the ground several feet around it literally covered with them, stopped by such a band. Where they are found early enough spray the tree on which they are with Paris green, and then bandage it that they may not escape.

A correspondent of the Wisconsin Agriculturist tells how he succeeded in growing turkeys which took first premium at the county fair, by manuring his field liberally with guano, sowing oats and plowing them under, then plowing the land in ridges three feet apart, and sowing turkeys on the ridges. He had Flat Dutch turkeys that weighed nine pounds and Rataugas that weighed five pounds, and took first premium on each.

We do not desire to criticize his method of growing and cultivating them, though he plowed between them with a light plow, drawn by one man, while another held it, but we would criticize the county society that would award the first or any other premium to such overgrown specimens of turkeys, unless they were grown expressly for stock feeding, and labeled as such. They could not have been very good for table use, at least we never saw large ones that were, and they would not have been sold in any market about here for table vegetables. While a four-pound turkey might pass among others if very smooth and handsome, most dealers or consumers would prefer them much smaller.

To grow good turkeys for the winter market here one needs newly broken soil, rather light, and not heavily manured, though seaweed or wood ashes may be used freely, and the ordinary commercial fertilizer is of three per cent. nitrogen, eight to 10 per cent. phosphoric acid and three to four per cent. potash is very good also, but would be benefited by more potash. Sow about last week in June or first week in July in rows 2 1/2 to three feet apart, and when up to six or eight inches apart, and there should be turkeys that are good enough to go on any one of the best markets in the State. We think the best varieties are the Skirving's Sweet German as a white turnip, and Skirving's Improved Ratauga as a yellow turnip. There may be others better but we do not know them. We believe one man with a good seed box could do more work and do it better than two with a light plow, though we always used the horse and light cultivator, going very shallow below the row.

He, however, has a correct idea in saying that he would prepare his land by fertilizing at the rate of 300 to 600 pounds acid phosphate and 400 to 800 pounds kainit to the acre, and use no clover or peas to plow under, and use no fertilizer on the turkeys directly. This is a good method of supplying the needed nitrogen, although we think manure of potash, 50 per cent. actual potash, is a better one.

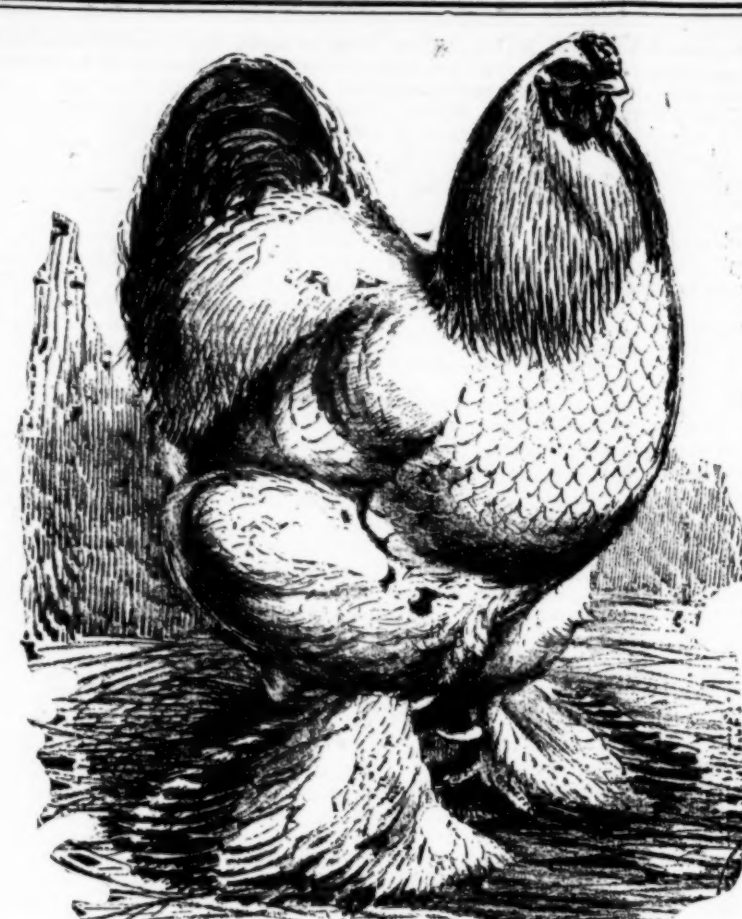
We believe that turkeys are among the best roots grown for sheep, dry cows and growing young stock, but we never grew any but the strap-leaved, flat turkeys expressly for that use, and do not think them as good as the white French or Rataugas. We grew these for market, and anything that looked as if it would weigh more than four pounds we threw among the little ones for stock feeding.

In a bushel of good hard-wood ashes there are about four pounds of potash, 15 pounds of lime, 25 pounds of magnesia, one pound of iron, and one and three-quarters of a pound of sulphuric acid. All of this is either plant food, or assists in making available plant food in the soil. Twenty bushels of such ashes is none too much to use upon good land for almost any crop.

A writer in the National Rural tells of one of his neighbors who paid \$6 a bushel for seed of the "Wonderful" cow pea, and paid freight, while he could have bought the same kind under its old name, the "Clay," in his own town, at \$1.25 a bushel. Now a party is selling the "Wonderful" at \$1.25 a bushel, while the "Early Red" is selling at 65 cents to \$1 a bushel, and he can see no difference in them.

We do not advocate the cow pea for use in the Northern States, but we mention this to call attention to the fact that such swindles (we cannot think of any other appropriate name) are not limited to cow peas, but are even more common among our garden seeds. Not only should those who buy seed of new varieties at high prices, to find them old sorts under new names, make haste to expose all such frauds, but our experiment station should devote a part of their time and money to testing all such new seeds, and comparing them in every particular with the older and cheaper kinds which they resemble. When the late Dr. E. L. Sturtevant was at the station at Geneva, N. Y., several years ago, he tried hundreds of varieties of garden vegetables from the result of finding many kinds masquerading under the name of some popular varieties, and also finding old and well-known sorts being sold at extravagant prices under new names.

His work in this direction resulted in a weeding out of a great many names from the seed catalogues of that day, but there is opportunity for more work of the same sort now, and no farmer can do it as well as the experiment station could do it, without considerable expense. He planted or sowed seed of all suspected kinds on the same day in similar soil, and noted date of germination, of blossoming, and of reaching a condition fit for table use, with all other characteristics, and thus found many identical though sold under names very different and at widely different prices, and he found differences in seed sold by the same name by different dealers.



LIGHT BRAHMA COCK.

Another point we learn from the Rural correspondent. Some of his neighbors are sowing the cow peas along with German millet, as the millet gets too dry in corn, and it is benefited in feeding properties by absorbing moisture from the pea vines which need more curing. Both are better than either alone. If this is true of cow peas, it might be well for Northern farmers to mix the Canada pea with the millet when grown here.

Late Potatoes.

The crop of early potatoes generally brings the highest prices, but the yield is, as a rule, smaller than the late-planted crop. The majority crop on most farms is the late one. The early potatoes form only a fraction of the crop, and are planted as a sort of incidental makeshift to fill in the time and prepare ground for late fall crops of greens or grains. A great many dealers that they can clear off the early crop of potatoes in time to get the land ready for seeding wheat, clover, or some other late crop.

Acres for acre, however, the early crop of potatoes brings in as much profit as the late-crop crop, because the prices received are so much higher. The reason why the emphasis is placed upon the late crop of potatoes is not far to seek. The crop naturally yields more, and the potatoes can be kept much longer. The late varieties are usually better keepers, and they mature when the hot weather is about over. If the prices are not satisfactory for them they can be stored away and kept all winter. The early crop matures in the middle of the weather, and they must be sold very quickly if any profits are to be realized on them.

But is the difference in the yield between the early and late-planted potatoes due entirely to the varieties used for seed? I do not think so. There is reason to believe that more is due to the condition of the soil and weather than to the quality of the seed. Our early potatoes suffer from too early planting, and the reason when we put the seed in is not the right one. The ground is too cold and damp for the potatoes, and their growth is slower and less vigorous. Moreover, when the soil is so damp and cold it is impossible to make the ideal potato seed bed. This, as every one knows, should be very fine, and the soil should be worked up to a mellow condition. This can be done late in the season, but then in the early spring, it is almost impossible to get a perfect seed bed when the soil is first turned over after a long winter. No amount of plowing, harrowing and good tillage will bring it into perfect mechanical condition that exposure to the elements will accomplish later.

WILLIAM CONWAY.

Domestic and Foreign Fruit.

A few new apples from Norfolk have arrived in half-barrel baskets, and sell at 75 cents to \$1.25 a basket. Even the best are not first class, and a higher price awaits the one who sends some nice apples. There is but a light supply of berries and prices are higher. The strawberries are mostly from Maine and northern New York, and sell from 10 to 15 cents a quart, according to quality. There are blueberries from nearby points at 13 to 15 cents a box and from York State at 10 to 12 cents. The last of the Maryland raspberries are selling at 8 to 10 cents. Blackberries from Maryland and Delaware are at 13 to 14 cents for large and small at 7 to 10 cents. Gooseberries, large green, at 6 to 9 cents a quart. Raspberries in pint cups sell for 7 to 8 cents a cup. Currants, large and small, at 6 to 7 cents and small for 5 cents. Native cherries sell for 8 to 10 cents a pound. But little California fruit. A few plums from Georgia are \$1.50 to \$2.25 a carrier, and peaches at \$2 to \$2.75. Peas are \$1 to \$1.50 a half box, but scarce. Watermelons, large fancy at \$2.00 to \$2.50 per hundred, and small at \$1.25 to \$1.75. Melons, good to fancy at \$2 to \$3 per crate, with ordinary for \$1 to \$1.50. Pineapples from \$2.75 to \$3.50 per case for 40 to 35, \$4 to \$4.25 for 30s and \$4.25 to \$4.50 for 25s.

Oranges remain nearly steady in price, but assortments are limited now. We find some seedlings and Mediterranean sweets at \$4 to \$4.75 for good to choice, and a few fancy at \$5 to \$5.25; late Valencia \$4.25 to \$5.00; Sorrento, good to choice 200 cents; and the demand has been light until this week, fair to good are \$2.75 to \$3.25 a box, extra fancy \$3.50 to \$4.25, and some extra fancy from \$4.50 to \$5.00.

Vegetables in Boston Market.

There was a good demand for vegetables in the market Monday, and on some varieties the scarcity caused prices to go up until many did not buy who intended to have done so. But since then they are gradually settling back to about last week's rates, with small recedes and advances. Live new beans are \$2 to \$2.50 a hundred bunches and carrots \$2.50 to \$3, old carrots \$1 per box. Flat turnips \$1.25 to \$2.00 a hundred bunches and 75 cents a box. Bunch onions \$1.75 to \$2.25 a hundred. Bermuda onions 75 cents to \$1 a crate; look 60 to 75 cents a dozen, and chives 75

cents to \$1. Radishes 50 to 60 cents a box, cucumbers \$1.50 per hundred, green peppers \$2.50 to \$3 a case, egg plant \$1.50 to \$2 a box, native summer squash 75 cents to \$1 a half barrel basket, Marrow squash \$1.50 to \$1.75 a barrel, Watermelons, large, \$1.50 to \$2 per hundred, and small at \$1.25 to \$1.75 a dozen. Cauliflowers scarce at \$1.25 to \$1.50 a dozen. Lettuce in fair supply at 25 to 30 cents a box, and spinach 15 to 20 cents. Hothouse tomatoes 15 to 20 cents a pound, and Southern at \$1 to \$1.50 a crate. Green peas began \$2 to \$2.50 a bushel to Monday morning, but quickly advanced to \$3, and it is said some sold as high as \$3.50 to \$4 before night. Since the Fourth a few have been received from Maine that sold at about \$2.50, while few farmers are selling at lower prices on the street. Not a brick turnip in them now. String beans are quiet at \$1 to \$1.50 a basket. Asparagus is about done, but a little is selling at \$3 to \$3.50 a box. Rhubarb 75 cents to \$1 a hundred pounds.

Potatoes are steady with best Southern Rose and Hebron at \$3 to \$3.25. Fair to good ones from \$2.25 to \$2.75 a barrel, and a few old ones are sold at 60 to 75 cents a bushel. North Carolina sweets \$2 to \$2.25 a barrel crate.

The Influence of Stock.

In grafting fruit trees the relative influence of stock and scion is very important. In performing this work one is doing it for some particular result. That is, he grafts a scion on a stock for the purpose of increasing and improving the fruits of the scion. In some cases he finds his efforts neutralized wholly or in part by some peculiar influence which the stock exerts over the scion. Owing to this uncertainty of which will get the ascendancy, grafting is not so certain in its results as one could wish.

It is quite evident that the age of the stock has much to do with the matter. A young uniform scion will generally succeed itself, and the stock will have little influence on it, especially if the stock is old. Where both the stock and scion are young, vigorous and uniform, the two will blend together in a way that will produce marked improvements in the fruit. It would be difficult in such a case to determine beforehand which will have the greater influence. Usually, the influence of scion on root is more potent in root grafting than that of root on scion.

We are gradually reaching a better understanding about the blending of two varieties of fruits by grafting, budding and root grafting. There was a time, a few years ago, when information on the subject was very scarce. A few horticulturists were supposed to monopolize most of the knowledge, and they kept their information to themselves. But today it is quite apparent that grafting and budding are very simple operations, that any man with a little knowledge of horticultural methods can perform. It is this process, however, that has produced some of the greatest marvels of modern times. From these grafted fruits we have produced new varieties that have attracted world-wide attention. The very simplicity of the work should attract every grower of fruits to attempt to make improvements through it. There is a fascinating study in bringing two distinct varieties of fruits together on one stock, and then watch for the results. These results may not always be what one may earnestly desire, but now and then a fruit of great value is produced. Wonders may often be wrought in an orchard that does not pay by grafting the trees with scions taken from trees that yield marketable fruits. It is much easier and quicker to graft the old trees with new varieties of fruits than to attempt to raise a new orchard. And after all the grafted fruit is more apt to be true to its kind than the seedling, which may change and degenerate in its growing.

S. W. CHAMBERS.

The shipments of leather from Boston for the last week amounted in value to \$170,049; previous week, \$285,889; same time last year, \$100,734. The total value of exports of leather from this port since Jan. 1 is \$4,773,441, against \$4,368,103 in 1898.

The total shipments of bolls and shoes from Boston this week have been \$68,848, against \$100,734 cases last week. The total shipments of shoes for 1899 have been \$1,298,463 cases, against \$1,234,658 cases in 1898.

Eggs are firmer than last week, as the market is well closed up. Prices nominally are about a week ago, but unless receipts increase we shall look for higher prices soon. There are 115,558 cases in cold storage at Quincy market warehouse, against 139,474 cases a year ago, and 24,340 cases in cold storage at Boston, against a probable 8000 to 10,000 cases at this time last year.

Experiments made in the engineering department at Cornell University have shown that a bicycle with a large tire runs more easily with a large tire than with a small one. A two-inch tire, for instance, was decidedly easier to run than a tire of an inch and a half diameter.

Potatoes are ready to firm, with some of the trade asking \$3.25 per barrel for best Southern new. Quotations are at New South: fair to good, \$3 to \$2.50 per barrel; extra, \$2.50 to \$3.50; sweet potatoes, \$1.25 to \$1.50 per barrel or crate.

An increase in wool prices of fully one cent a pound, with sales largely in excess of last week, or at this season last year, indicates more

activity in the wool-manufacturing business, as there is but little speculative buying.

—In the past year and a half wool has advanced in London and on the Continent 50 per cent, and at the present time melino and fine crossbred wools are as high abroad as they are in Boston, notwithstanding the fact that they have free trade and America a high protective tariff. Wool has advanced here 10 per cent, since the large foreign shipments, and the movement has been nearly stopped, it is scarce, no doubt, by the higher prices here.

—Wool is still advancing under quite free buying by manufacturers. Territory wool in the country are keeping ahead of the Boston market in price, for they are five per cent, higher than here, having advanced five per cent, during the past week.

The exports of dry goods and merchandise at the port of New York last week were valued at \$10,878,861, against \$7,851,190 previous week and \$5,366,801 last year; since Jan. 1, 1898, \$76,877, against \$23,488,494 last year.

—Exports of goods at port of New York last week \$1,683,541, against \$1,302,431 previous week and \$1,372,142 for same week last year. Amount, \$1,533,592, against \$1,323,019 previous week and \$1,808,314 in same period last year.

—Mr. George Eliot says: "Purchases of wool by foreign buyers have been confined to staple wools. The great shortage in the world's supply of fine wools is forcing foreign buyers to scour the world's markets. The shortage in this year's Australian clip of Merino wools is alone estimated at 15,000,000 pounds. These wools have advanced about 80 per cent, since Jan. 1. While in domestic markets there has not advanced about 30 per cent, above the low prices ruling in March. The importation of foreign fine wools (cannot take place until prices here have advanced from 45 to 50 per cent."

The shipments of live stock and dressed

beef last week included 2446 cattle, 9852

quarters of beef from Boston; 2389 cattle, 50

sheep, 14,448 quarters of beef from New York;

sheep, 3354 quarters of beef from Baltimore;

249 calves, 1170 quarters of beef from Philadelphia;

700 cattle from Newport News; 3993 cattle, 4338 sheep from Montreal;

a total of 10,735 cattle, 4008 sheep, 37,028

quarters of beef from all ports; 6593 cattle, 2458

sheep, 21,716 quarters of beef went to Liverpool;

3865 cattle, 3488 quarters of beef to London;

1417 cattle, 1678 sheep to Glasgow; 409 cattle to

Bristol; 260 cattle to Hull; 591 cattle to Manchester;

1900 quarters of beef to Southampton; 60 sheep to Bermuda and West Indies.

—Reports from Argentine state that present

visible wheat supply is eight times larger than a

year ago. Argentine wheat exports to New York

from drought. The arrivals of new wheat to market

last week to market last week to confirm the

reports of the decline in the quality of wheat in the

fields. New wheat is up to grade in weight and quality

and far better than anticipated a month ago. Visible

wheat supply is expected to show another large increase

next Monday. During the week wheat has declined two

cents, and a study of the figures presented by the

exports of manufactured goods for the month of May

is sufficient to create a most optimistic sentiment as to

trade conditions. The exports of manufactured goods

for May, 1899, to \$30,816,314 in May, 1899. The

percentage of total exports was 24.86 in 1898 and 33.77

in 1899. For 11 months exports of manufactured goods

exceeded \$408,588,458. If June figures amount to \$35,156,000

the total for the 12 months will be \$440,000,000, or about

\$400,000 over the total for 1898.

—Traffic makes the exports from the Atlantic

Coast last week as follows: Flour, 935,000 barrels;

wheat, 1,521,000 barrels; corn, 3,806,000 barrels;

potatoes, 28,440 barrels; lard, 11,419,000 pounds;

meats, 33,278 boxes.

—Reports from Argentine state that present

visible wheat supply is eight times larger than a

year ago. Argentine wheat exports to New York

from drought. The arrivals of new wheat to market

last week to market last week to confirm the

reports of the decline in the quality of wheat in the

fields. New wheat is up to grade in weight and quality

and far better than anticipated a month ago. Visible

wheat supply is expected to show another large increase

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BOSTON, MASS., JULY 15, 1899.

An interesting light on the poet Hawthorne is given by the intimacy which his boyhood diary shows existed between him and a young mulatto named William Symmes, who furnished the diary for publi-

Perhaps, however, the sea is the desired spot. Here again the electricians may be employed to good purpose. Find out by making mistakes where the most crowded stretch of shore is, and be happy. Here instead of the crowd you will find the sand piper for intimate companion. There may not be trees, but there will be an infinity of sky and wonderful impressionistic colorings in the gathering storm, as it comes trailing clouds of glory, and making every line of poetry you know glow spring into life.

Of the sea the faded spot by boat. There are a number of harbor and ocean excursions from Boston matchless in their appeal to those really fond of the sea. Here to delight the imaginative nature lover are spectral lighthouses along the coast, ominous bell booms with their thrilling "shalls" where vessels refrain, while over all the thunderous roar of the surf.

Now, shore of necessity, even on an excursion boat, the "crowd" which thence noisily of that seeker for remoteness to whom we are just now addressing ourselves. We agree with this silence lover that "the world is too much with us" in the most obvious breathing places near Boston. Crows not dispensers of double-joined and wavy penmanship, but the nation that is the "reactionist" seeks.

Yet even for these, we insist, Boston in summer has many charms. As for those

OVER 6,000,000 F

The reason is simple as A B C.

Beecha

There is a reason for everything, and that is that they fill all the requirements of **NERVOUS DISORDERS** in a more satisfactory way than any other medicine ever placed before the public. Beecham's Tablets are the only medicine whether you require them or not—if not, it arises you should, in your own interest, to be best known to yourself but be that as it may, they are the only medicine to take in them in reasonable doses, and doing so is, in fact, the only way to cure them.

The enormous sale of Beecham's PILLS of testimonials, the fact being that

Sold everywhere, in boxes

BOXES SOLD YEARLY.

m's Pills Have been
tried for
50 years.

The reason for the popularity of Beecham's Pills is a general antidote for ALL BILIOUS and indigestive manner than any proprietary medicine. The Pills are brought before you, ladies, and, play, you may tomorrow—when the necessity make them. The reason for their need is often many, you will show good judgment by taking as simple as A B C.

has been achieved without the publication
Beecham's Pills recommend themselves.

10, 20 cents and 25 cents each.

habitant, cattle from the wives. I went on to say that Boston covered an area of about four miles, and was like Boston a year, it took at least an hour and a half to get to the center. I also said in continuation, that the town had three hills; upon the top of the highest, which all will recognize as Beacon hill, there were three little rising hills or spurs, called Trimount, from which mountain a man could overlook all the islands within the bay, as well as observe such ships as are on the coasts. On the three large hills upon which the town was built, viz., Beacon, Copp's and Fort hills, forts were built and a beacon erected, which was doubtless that upon Beacon hill, as being the highest eminence, where now stands the lately erected column to identify the spot, and

BUCKEYE
FOR
1899

**FIELD & COWLES,
INSURANCE,
85 WATER STREET,
BOSTON.**



combined. All sizes and capacities. Save sizes \$200. to \$2,000. per cow per year. Save, to \$10. per cow per year over not setting a separator. And \$2. to 5. per cow per year over inflicting separation.

New and improved machines for 1904. Send for new Catalogue containing a full set of up-to-date daily information.

THE DE LAVAL SEPARATOR CO.
 RANDOLPH & Canal Sts., | 74 CONANT ST.,
 CHICAGO. | NEW YORK

Also for Sale by
JOSEPH BRECK & SONS, Corporation
 BOSTON, MASS.
 Easy Terms if Desired.

There is a reason for everything, and the reason for the popularity of Beecham's Pills is that they fill a real need. They are the only medicine that cures **NERVOUS DISORDERS** in a more satisfactory manner than any proprietary medicine ever placed before the public. They relieve the distressing symptoms of **HEADACHES** and **INDIGESTION** which you experience then or not—if not today, you may tomorrow—when the necessity arises you should, in your own interest, take them. The reason Beecham's Pills are known to just as many people as the name of Beecham is because of good judgment by taking them in reasonable doses, and doing so is as simple as A B C.

The enormous sale of Beecham's Pills has been achieved without the publication of testimonials, the only thing that being the fact that Beecham's Pills recommend themselves.

Sold everywhere, in boxes, 10 cents and 25 cents each.

MARKETS.

BOSTON LIVE STOCK MARKET.

Week ending July 12, 1899.

Amount of Stock at Market.

Shotes and Fat Cattle, Sheep, Hogs, Veals

Week. 4041 4831 34,331 2624

Last week. 4094 5034 34,331 2624

Values on Northern Cattle, etc.

Beef—Per hundred pounds on total weight of

beef, calves and yearlings, \$6.00; 2nd

quality, \$5.00; 3rd quality, \$4.00; 4th

quality, \$3.00; 5th quality, \$2.00; 6th

quality, \$1.00; 7th quality, \$0.50; 8th

quality, \$0.25; 9th quality, \$0.10; 10th

quality, \$0.05; 11th quality, \$0.02; 12th

quality, \$0.01; 13th quality, \$0.00; 14th

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BRIGHTON, TUESDAY AND WEDNESDAY.

Stock at yards: 1092 cattle, 491 sheep, 13-

081 hogs, 1096 calves, 170 horses. From West

Maine, 180 cattle, 100 sheep, 100 horses;

2 cattle, 1 sheep, 81 calves; Massachusetts

224 cattle, 131 hogs, 540 calves.

There were 1092 head of cattle landed here by

rail during the week. Some of the Western were

of export. Western cattle cost fully 1/2c higher

than last week, and dealers are anxious to sell

very firm in price. We noticed fair activity on the

part of all grades, and the outlook encouraging

to the dealer. C. Brown sold 4 oxen, of 6500

lbs. at 1/2c; 6 cows of 7010 lbs. at 3/4c; 37.00

D. W. Hargrove sold 12 calves, of 6500 lbs.

Hurd of North Berwick, Me., of extra grade

weighing 1600 lbs. at 3/4c; also sold 17 oxen, of

2500 lbs. at 1/2c; 2, 2300 lbs. at 3/4c; 3 of 4170

lbs. at 3/4c; all good stock. Harris & Fellows

2 oxen, of 1400 lbs. at 3/4c. H. M. Lowe sold 2

oxen, of 700 lbs. at 1/2c. P. A. Berry, 4 oxen,

of 5400 lbs. at 3/4c; 10 beef cows, av. 900 lbs. at

3/4c.

Late Arrivals and Sales.

There were no buyers at the yards, and some

improvement in the demand, but still a great

chance for improvement. Buyers not disposed

to pay high prices, and dealers are anxious to sell

out. Sales mostly at 3/4c to 1/2c. Brock & Wood

sold 4 calves, of 650 lbs. at 1/2c; 10 calves, of 650

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ALCLOYNE, 2:27, by GEORGE WILKES, Price, \$ 25.00
(Dam, Clayrene, by Bayre's Henry Clay, 3:30; 3d dam, Voluntary (dam of Blackwood
Stee), by Volunteer 55; 3d dam, Fanny (Millingtons Mars, dam of Young Sentinel,
Seely's American Star 14. 2:30, etc. of 17)

Alcloyne will make the season of 1899 at my stable in Andover, Ke.

TERMS TO WARRANT, \$20.00.

Card giving extended pedigree, terms for keeping mares, etc., sent on application.

WM. CREGG, Andover, Maine.

TROTTING REGISTER FOR SALE.

A complete set of Wallace's American Trotting Register, Vol. 1 to 13, inclusive. Price, ONE
HUNDRED DOLLARS (\$100.00). A valuable addition to any Horseman's library, invaluable
to the student interested in pedigrees (Vol. 1 and 2 are out of print and rarely secured. Address

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